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NOT BOUND TO SWEAR TO THE DOGMAS OF ANY MASTER.

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ORIGINAL COMMUNICATIONS.

CONSIDERATIONS IN REGARD TO AFFECTIONS OF THE EARS OF CHILDREN, AND THE NECESSITY OF A MORE EXTENSIVE KNOWLEDGE UPON THIS SUBJECT BY PHYSICIAN, TEACHER, AND PARENT.

BY F. CORNWALL, M. D., OF SAN FRANCISCO, CALIFORNIA.

THE anatomy of the ear is, and has been for quite a length of time, well understood, but the principles upon which audition is founded is the subject of considerable controversy. Physiologists have held theories more or less tenable in regard to the physiology of hearing and the particular function of the different parts of this organ. As an instance, the theory of "sound waves," through concussions in the atmosphere, impinging upon the drum membrane, and from these being conducted by the ossicles to the internal ear, etc. There is a great advantage in making investigations with regard to the eye, compared with that of the ear, in that the transparency of the former permits us, by means of the ophthalmoscope, to see more of the inner parts of this organ during its functional activity.

Various expedients have been resorted to in order to be able to ascertain the location and character of disease of the

different parts of the ear, from which have resulted considerable accuracy. We are free to acknowledge that otology lacks much of being an exact science, or even an art, which, by the practice of its devotees, results in the great good that it ought; but, when we contrast the practice of to-day with that of the ages past, we can but be thankful for what has been achieved. Dr. Roosa, of New York, in his admirable work on otology, has given the progress of knowledge in this department of medicine, from which we glean the following:—

In the times of Hippocrates and Aristotle (570 B. C.) nothing seems to have been known in regard to the ear beyond the *membrana tympani*.

Rufus of Ephesus, who lived in the age of Pliny, used the names descriptive of the ear, helix, lobe, tragus, and antitragus, which are still retained as names of the different localities of the auricle.

The church, during the dark ages, prevented anatomical investigations on the human cadaver and, as a consequence, there was no advancement in the science of anatomy. Within the fifteenth century, Italian anatomists discovered and described the little bones of the ear, and described the *membrana tympani*. The names of the anatomists who made discoveries, or described a part of the ear, are quite familiar to most of us, as these parts have received their names in most instances. There are the Fallopian aqueducts, discovered by Gabriel Fallopius; the Eustachian tubes by Bartolomeo Eustachius, etc., etc.

There was a more or less gradual development of aural anatomy during the sixteenth and seventeenth centuries, until, in the eighteenth century, when Valsalva astounded the age by rising above his predecessors a head and shoulders in the exactness of his knowledge. He devoted sixteen years of his life to the study of the anatomy of the ear. Many others have extended these researches in anatomy of the ear, until to-day, although there may be much to discover, there undoubtedly exists a great amount of accuracy of knowledge.

The progress in the therapeutics of the ear has not been, particularly in the earlier ages, commensurate with that of anatomy. It has been reserved for our own age to wrest from crude empiricism the aurist's specialty, and to adapt a treatment which is not only rational, but comparatively successful. Hippocrates, although possessing the most limited knowledge of the anatomy of the ear, or the pathology of its diseases, recommended a harmless and quite effective method of treating acute inflammations of the tympanic cavity, viz.: the dropping or instillation of hot water into the meatus. Æsclepiades, a friend of Cicero, recommended for the ear, oil in which cockroaches were cooked, while a piece of henbane in oil of roses, or woman's milk, were afterwards added. Way back in the time of Galen, opium seems to have been a common application in the ear, as he condemns the practice. The centuries between Galen and Valsalva (130 to 1700), were fruitless for good in aural therapeutics, as during that time every useless and harmful agent that benighted brains could conjure up was used in the ear for its various complaints. During all these dark ages there was taught that the ear must not be meddled with—should never be cleaned, no matter how loathsome its condition; and to add to the nastiness there was dropped into it for purulent discharges all kinds and descriptions of nasty compounds, a couple of which I will append:—

Peter Forrest, of Rome, cured deafness with water that was distilled over a young mouse having no hair.

A monk in the seventeenth century used a mixture in which there was urine of the female.

Valsalva's century was cursed by theoretical treatises, the authors of which recommended many of these magical ear drops. It will astonish any observing person, when caused to review the old and the new methods of treatment, to find how many of the old vagaries still cling to us. Many physicians of respectability continue the use of chloroform and laudanum, with stimulating essential oils, in the ear. Many of the same class say "let otorrhœa alone"—that to cleanse an ear

so affected is dangerous, and that if the discharge is arrested the individual will die; also, that when the drum membrane is destroyed that deafness will surely be the result. The untenableness of these prejudices are so easily demonstrable that any intelligent mortal, upon a second thought, if he be the possessor of an ordinary school-boy's education, ought to discover them. It is common for us of the nineteenth century, to think that we have thrown off the bondage of ignorance—our legacy of the dark ages. But there is much yet to accomplish. Many of these ignorant practices are still adhered to by the people, and even by physicians who are not familiar with the advanced methods of diagnosis and treatment of aural disease. Not only is this the case, but there are many affections of the middle ear which were thought to be dullness or stupidity of the individual. This condition has led to a great amount of unfair and cruel treatment of children by parents, and by teachers in our schools. It is commonly thought a child who persists in saying "what" when spoken to or asked a question, is willfully stupid.

I will briefly refer to the anatomy of a part of the ear of which I shall speak concerning its diseases.

We have first the external ear, the auricle, which, as you know, is a funnel-shaped structure which presents many furrows and elevations upon its surface. There has been much said as regards the function of this part of the ear. It is commonly supposed to be that of a trumpet, as it were, for gathering in and concentrating sound waves upon the drum. This seems plausible, as some of the lower animals have such large auricles, but when we consider that some of them—such as birds—have scarcely any development of this kind, we find ourselves mystified. There has been very extended research upon this subject, which is interesting as well as profitable to the physician or scientist, but it is not within the province of this article to bring them forward. Communicating from the auricle to the drum membrane is the external auditory canal. This canal is partly cartilaginous, and partly bony in its structure, and is lined by dermoid tissue. Its

direction is at first inwards and slightly upwards; when, at about half its length, at the junction of the cartilagenous portions, it turns its course inwards and slightly downwards, making an angle at this point. This angle can be easily overcome by pulling the auricle upwards and backwards. In some persons the meatus is very nearly straight, and in others the angle is very great. It is thought to be a fact, by those whose observation is extensive, that persons who have very straight canals are apt to be possessed of musical appreciation and talent, and those whose canals are very angular are the reverse. They cite the fact that negroes, almost universally, have straight auditory canals, while other races which have not distinguished themselves for musical talent, have very crooked ones.

At the inner end, or extremity of the meatus, the membrana tympani, or drum membrane, is situated obliquely directed downwards and inwards across the canal. This membrane is about the thickness of ordinary writing paper, and is, at about its center, drawn inwards by the malleus handle to the long process of which it is attached at this point.

The middle ear, or tympanic cavity, is directly inwards from the drum membrane, and is irregular in shape, measuring about ten mm. in its antero-posterior diameter, four to six mm. from the membrana tympani to the internal ear, and is about six mm. high. Above, the cavity is separated from the cranial cavity by a thin bony septum. This septum contains numerous foramina for the passage of blood vessels, and also, at times, congenital fissures. It can readily be conceived how easily inflammatory processes might extend from the tympanic cavity to the brain.

Posteriorly this cavity is in relation to the mastoid cells which communicate with each other at this point by one large irregular opening and by several smaller ones. Anteriorly there is the Eustachian tube, which forms an atmospheric communication with the throat. The mucous membrane lining the nose and throat is continuous through the Eustachian

tube to the middle ear, and it is from this source that disease invades this cavity. On the inner wall we notice two foramina. 1. The oval foramina, which leads into the vestibule and is closed by a lining membrane, and is occupied by the base of the stapes. 2. The round window, or *fenestra rotunda*, is back of the *fenestra ovalis* and is also covered by a membrane. The ossicula, or little bones of the ear, are: 1. The malleus. 2. The incus. 3. The stapes. The malleus is connected with the *membrana tympani* externally and the stapes with the foramen ovale internally. Atmospheric vibrations coming in contact with the drum membrane put it in motion, and this is conducted through the chain of ossicles to the foramen ovale, and this to the internal ear, wherein resides the nerve of special sense of audition.

The internal ear, on account of its complex structure, has been named the labyrinth. It is composed of bony cavities formed by the petrous portion of the temporal bone. These cavities contain inside another membranous portion, which is separated from the bony part by a clear fluid. It is in this membranous portion that the ultimate nerve fibers are distributed. I shall make no attempt to describe the anatomy of the labyrinth, as it is not my purpose here to treat of its diseases.

The physiology of hearing might, with good reason, be introduced here, but inasmuch as most school physiologies embrace a tolerably fair exposition of the latest developments in this department, I will omit it.

The common cause of deafness is catarrhal inflammation of the middle ear. In childhood, from the effect of measles, scarlatina, and the frequent colds in the throat to which children are liable, chronic and acute affections of the tonsils, the nasal and pharyngeal mucous membrane is almost continually in a state of hyperemia, which leads to hypertrophy. These affections frequently attack primarily the Eustachian tubes and middle ear; but independent of this, the ear becomes congested through contiguity. There is a great tendency to extension of inflammatory processes in the mucous mem-

branes, and it is in this way that these nasal and pharyngeal inflammations extend through the Eustachian tubes to the middle ear cavity. The pharyngeal orifice of the Eustachian tubes becomes swollen shut by an hypertrophied pharynx, and in this way from the drum cavity becomes exhausted and the membrane collapsed, or drawn inward. When the drum membrane is held forcibly in one position the tensor tympani and levator tympani are forcibly held stationary; the joints between the ossicles are also held motionless; so that, as time elapses, more or less auchylosis takes place,

We all know that when we have a coryza, or fresh cold, that our ears become "stopped up," *i.e.*, the Eustachian tubes at their pharyngeal orifice are swollen shut, the drum membrane is rendered motionless, and as a consequence we are partly deaf. Persons who have chronic nasal or pharyngeal catarrh, as a consequence are likely to become partly deaf. There is another form of non-suppurative inflammation of the middle ear, which occurs from constitutional causes, such as struma or hereditary syphilis, etc., and does not extend from the throat, but is primarily a disease of the ear. It is called proliferous from the fact that it is characterized by a great amount of hypertrophy and new formations. It is not my object now to speak of treatment of these varied conditions, but of their causes, inception and prevention. The true province of the physician is as much the prevention of disease as the cure, and in this sphere he becomes the educator of the age. This sometimes seems a thankless job, as people give up their old notions with great reluctance, and treat the physician as an innovator, who is trying to upset their cherished faith.

These affections of the middle ear, are permitted to develop in the child, and fasten themselves upon it, until, at adult or middle age, they are fixed and incurable in too many cases. The honest physician is unable to give relief, and so expresses himself; and then the old story comes of the charlatan being consulted, feed, etc. A child who is suffering from frequent attacks of coryza—symptoms, a *stuffed up nose and*

thick hearing—needs great care, and perhaps some medical treatment; and it is the province of the family physician to give this advice and see that is carried out. It is a common belief that children outgrow their childhood diseases, which, under the most favorable circumstances is inclined to be the case, or partially so at least; but where the surroundings are not favorable during the years of puberty, or where the inflammatory action has taken a deep hold upon the tissues; the disease will remain for life as a remedyless defect.

In the last number of the *Archives of Otology*, edited at New York, there is an article by E. Weil, of Stuttgart, Germany, translated by W. C. Ayers, M. D., of New York, on the "*Results of an examination of the ears and the hearing of 5,905 school-children.*" The result of this examination revealed the fact that the greater number of school children were sufferers from some kind of aural affection, and as a consequence their status was below the normal in varying degrees. High schools and colleges, in which were taught the children of the wealthy, did not suffer so universally as in the schools of the poor; which was undoubtedly owing to their better sanitary condition, both at home and at school. In both cases the children and parents were ignorant of the fact that there existed an aural defect, or that there was treatment required even where they were aware of its existence. Very many of these pupils were astonished when they found that their hearing was not good. If they could not understand what people said to them they imputed it to their indistinct manner of speaking. The author came to the conclusion, from his extensive investigations, "*that the ear requires more attention on the part of physicians and authorities, especially those connected with schools, and also on the part of parents, than has heretofore been conferred upon it.*"

ANTISEPTICS IN THE PUERPERAL STATE.

BY D. MACLEAN, M. D.

THE period of gestation is one of high vascular and nervous tension. There is an exaggeration of all the functions of the system. We have disorders of digestion, respiration, circulation, secretion, excretion, and nerve tissue.

In order to understand the proper management of the puerperal state, it is necessary to understand the condition of the patient at the commencement of labor. Gestation modifies every liquid and tissue of the system. During the later months there is an increased proportion of water, fibrin and white corpuscles in the blood, with a diminution of albumen and red globules. It is a state of anæmia. If there has been much hemorrhage during labor, there is a still further deviation from the normal standard. The patient is still more anæmic.

This condition of itself invites disease. The system has been drawing from its own store-house to nourish the foetus, leaving it incapable of any great resistance from sources of danger, both within and without. But further changes take place after parturition, engendering septicemia, and it is to avoid or correct this condition, that it is necessary to use antiseptics.

The uterus at the completion of gestation is greatly increased in volume and weight, from $2\frac{1}{2}$ inches in length in the unimpregnated state to 12 inches, and from 2 oz. in weight to 24 oz. The second day after labor, the system commences the reduction of the excessive volume and weight. A disintegration begins in the uterus and other structures which have been increased during the period of gestation. The muscular fibre cells undergo a fatty degeneration, and the absorption and excretion of the waste material steadily progresses, until at the end of the sixth or seventh week the uterus is reduced to the normal volume and weight of the unimpregnated state. This material produces septicemia unless it is modified in its passage through the lymphatics.

and liver, or even then unless the organs of excretion are in good working order. If from any cause the lungs are deficient in action, or the skin and kidneys fail to perform their functions, this waste material accumulates and the system is self-poisoned.

The same result follows injuries to the vagina from pressure of the child's head in its descent; the mucous membrane becoming partially separated from the submucous tissue, lacerating vessels, followed by extravasation of blood, and frequently abscesses. We can readily perceive why septicemia might follow the absorption of such material.

Another source of septicemia is the absorption of the lochia, and blood which may remain in the uterus and vagina, and undergo decomposition from contact with air. Such material becomes highly poisonous, and if there are any lacerations or abrasions of the generative tract, it finds a ready entrance into the system.

These sources we have been describing are *autogenetic*; they arise from the patient herself. There are other sources, *heterogenetic*, arising from infection from without. Poisons altogether foreign may be conveyed by persons in attendance, the traumatic condition of the tract rendering absorption easy. A puerperal patient is also very susceptible to zymotic diseases.

Having thus briefly glanced over the sources of danger, we shall be in a better position to prevent the evil and protect our patient. Two objects are to be kept in view in the care of the puerpera. First, To prevent the entrance of poison, and second, to neutralize its noxious influence, and remove it from the system, if it gains an entrance.

The first thing necessary is to place the system in a good condition for defense. Starvation on thin gruel is an invitation for the absorption of poisonous material. The more, and the better the system is supplied with wholesome, easily digested nourishment, the less it will absorb from vicious sources. Care, however, must be taken not to overload the stomach. For the first few days, a selection can be made

from broth, beef tea, milk toast, eggs, with gradual additions of more solid food, according to the state of the stomach.

The patient should be placed from the start on quinine and ergot, with opium if necessary. The object is to promote contractions of the uterus, thereby prevent hemorrhage, and the absorption of septic matter. With the same end in view, particular attention should be given to the proper application of a bandage and compress.

It is well to give an enema, the mild aperient the second day, the action of the bowels causing the expulsions of any clot which may have formed in the uterus or vagina. Strict attention must be given to all the organs of excretion, that they may be enabled to expel the enemy that enters within the gates.

The vagina should be washed out twice a day as early as the second day, with a solution of carbolic acid, two drams to the pint. If there is any febrile condition, the uterus should also be washed, thereby removing any accumulations, and stimulating the surface to healthy action. A certain proportion of the acid will also be absorbed into the system, counteracting the noxious influence of the poisonous material absorbed.

The patient should not be required to remain quietly on the back, but change position as often as she finds it necessary. She should also be encouraged, unless very weak, to sit on an ordinary vessel, so that clots may pass, and the fluids drained away, which cannot take place so well in the recumbent position. If the patient cannot be permitted to sit up, the head and shoulders should be elevated above the pelys, and drainage promoted in this way.

All antiseptic precautions should be taken. The physician should use carbolized vasaline in making his examinations. Any instrument in use should be anointed with the same agent. Carbolic solutions, one in forty, should be used about the utensils in the room, and everything liable to produce poisonous emmations thoroughly disinfected. Pure air should be furnished in abundant supply. Good ventilation is absolutely necessary; care at the same time being taken that

the patient is not exposed to cold drafts, which would interfere with the action of the skin and other excretory organs.

The febrile disturbance which usually occurs about the third day, commonly known as "milk fever," is undoubtedly owing to the absorption of foul material, and not to the establishment of the secretion of milk.

The first two days the system is resting, but by the third, absorption rapidly takes place. Hence the necessity of early precautions, to guard against sepsis, and the use of such measures as shall prevent the poisoning of the system from *autogenetic* or *heterogenetic* sources.

THE WAY WE WEAR OUR CLOTHES.

BY A COUNTRY PRACTITIONER.

PERHAPS some readers of this JOURNAL will be alarmed by the above caption, thinking that their rural correspondent is going to review the autumnal fashions. This, I would wish to state, is not my design, although I may refer somewhat to the effect of the evil of sacrificing our comfort for the sake of dressing in the accustomed style. The physician, as a conservator of health, should be a model in his community in his mode of dress, in order that he be able to practice what he preaches.

There is a class of diseases that afflict our modern generation which were more or less unknown to our forefathers; and the question suggests itself to us aptly, what sin have we committed that we should be so punished? Our generation boasts of its practical scientific attainments; of its emancipation from the barnacles of superstition whereby we were enslaved; it ridicules our ancestry for their ignorance of the causation of disease; it has astonished the world by the development of its germ theories, the creative and reparative forces inherent in a living organism; and its destructive forces, the bacteria, micrococci, animal and vegetable malaria, etc. All these are fluently discoursed upon, so that one would think a sanitary millennium was approaching in

which pain, disease, and almost death would be abolished. All this knowledge is good, as it has led to the creation of sanitary laws regulating great cities, whereby they are made much more habitable than they would otherwise be; the number and virulence of epidemics being much less than a few centuries ago. But our civilization has made us delicate, has lessened our resisting power to the depressing agencies which cause disease, until with all our bettered sanitary conditions, we still suffer from fatal epidemics. The particular influences of our civilization is to make us susceptible to any depressing influence. The chief factors which go to produce this susceptibility are our mode of dress, and the character of our habitations. Much might be said of the way we wear our clothes, and therefore I shall present some of the results of my observations upon this subject.

A thinking person can but notice, in the ordinary way of clothing ourselves, the uneven distribution of clothing over our bodies, and also the lack of common sense we display in making our changes of apparel from indoor to out, and from one part of the day to another. Over our body nearest the center of circulation we wear too much clothing, and at our extremities, the parts most remote, we wear too little. The neck, too, is insufficiently clad, and from this cause, I am well convinced, we can attribute a great number of inflammatory attacks we suffer from in this region. From nature we derive our best lessons, and in this matter a most important one is taught. The lower animals, particularly those of colder climates, are as abundantly protected at their extremities, and especially at the throat, as on other parts of the body. I would ask you to make a comparison between nature's protection, and its distribution over the body in the lower animals, and the way we are disposed to protect ourselves. You will see that it is quite as irrational as the sheep that gets its head in the shade of a shrub, and fancies, by its apparent contentment, that the whole body is protected from the heat.

We will take, as an example, a gentleman's dress, and see

how supremely irrational it is. His neck is unprotected and his chest in front, nearly so; the back part of his thorax is covered by six or eight thicknesses of some kind of fabric. The hips, of all other parts, has a great excess of clothing, while, in a reality, it needs as little, if not the least. All the garments lap at this part of the body, so that, if you will take pains to count them, you will see that there are about a dozen thicknesses, made up of innumerable shirts, drawers, pants, vests, coats, etc. On the other hand one thickness of cotton hose is the usual covering for the ankles when shoes are worn.

The houses in this country are usually cooler through the day time than the out door, but yet the gentleman, when he takes a walk, adds an overcoat, which is worn open, and can serve no other purpose than to make the individual perspire from the extra load, and act as a kind of pack to the spinal column. When, having finished the walk, the coat is removed and the individual proceeds to cool off from his perspiration. There is no circumstances, in a climate as mild as this, wherein a gentleman need to add an overcoat to the clothing usually worn in the house, while walking. The exercise is sufficient to protect the body against a considerable decline of temperature, should this exist. There is no one so foolish as to blanket his horse while driving him, and then take it off when the horse is resting. Such a procedure would ruin the hardiest of roadsters, and yet the gentlemen submit themselves to the ordeal daily without seeing the harm of it.

It is supposed that the ladies' clothing is equally liable to criticism. The waist and hips are surfeited, while the extremities are left nearly naked. There is scarcely any end to what might be said of the abuse of our manner of clothing ourselves, but the required brevity of this article will not admit of further mention. I think that underclothes for ladies, gentlemen and children should be worn in suits which are complete so as to avoid a part, at least, of the inevitable bundling of the hips. The drawers, where persons have a

feeble peripheral circulation, should be knitted double from the middle of the thigh downward, and the ankle should be well protected by having a strip pass under the sole of the foot to hold the drawers down. When boots are worn, this latter precaution need not be observed. The front part of the chest should receive as much protection as the back part, and an overcoat, for either lady or gentleman, should not be worn while walking. It is estimated by a competent observer that in New York City seal-skin sacques produce more deaths than small-pox and scarlet fever combined. In this case there is nothing added for the protection of the lower extremities, while the trunk—the part needing the least, is fairly poulticed with this warm coat. The lady wears it while she walks, and sits with it on while in over-heated theater, halls, churches, etc., but when she returns, fatigued and surfeited with heat, she removes her coat and cools off. The diseases we entail from all these indiscretions are nasal, pharyngeal, laryngeal and bronchial catarrh, and these are the affections that are so disgustingly prevalent now-a-days, and were so little heard of until within a few years. Of course there are other causes by which we become delicate, besides our indiscretions in dress; so much so that we raise our children as we would a delicate tropical plant, and, as a consequence, the first chilly breeze that comes along causes their death.

Much might be said of the bad way in which children are clothed with their almost naked legs and arms and their over-bundled bodies. From its very birth the infant has its belly padded as though it were the source from which all mischief might come, through being exposed; while the shoulders and extremities are, as usual, nearly naked.

You may build a model city which may have an atmosphere free from sewer gas or other decomposing organic mala-ria; disinfect it (the atmosphere) *a la Lister*, till the micro-cocci and the other innumerable little *cusses* that inhabit the atmosphere we breathe are all destroyed, if we persist in having ourselves so unreasonably clad, and housed, we may still

expect unkind and premature visitations of Providence in the removal of our loved ones from our midst. We may still expect to have our nasty noses and throats, our coughs, consumptions, etc., etc.

CROUP.

BY I. J. M. GOSS, A. M., M. D.,

PROF. OF THE PRACTICE OF MEDICINE IN THE GA. ECLECTIC MED. COLLEGE.

(*An Excerpt from the Author's Practice.*)

CROUP is divided by authors into four varieties—Membranous, Inflammatory, Catarrhal and Spasmodic Croup. The Membranous is true croup, and laryngitis, with an exudation, is known by the other names, as membranous, diphtheritic, exudative, and fibrinous croup.

THE SYMPTOMS OF TRUE CROUP.—This laryngeal inflammation, with an exudation, is generally insidious in its attack. It may commence as a slight catarrh. The child will be a little hoarse, with some cough, which is also hoarse and barking. These symptoms may exist several days before any alarming symptoms are manifested. As soon, however, as the bronchial membranes are sufficiently obstructed, either by spasmodic closure or exudation, then the symptoms become alarming. If the obstruction be due to exudation, it is shown by labored respiration. There may be a full pulse and fever also. In this form, and in simple spasmodic croup, there is lividity of the face and suffusion of the eyes. True Croup usually advances more slowly than the false croup. Spasmodic croup usually comes on rapidly and very suddenly. And in my very extensive practice for forty years, I have been called mostly at night to this form of croup, that is, to the really spasmodic form. Spasmodic croup almost always comes on suddenly and is very alarming. All forms of disease of the larynx are dangerous; for the spasmodic affection may be so severe in the glottis and epiglottis, as to arrest the respiration. The cough in spasmodic croup is short, sharp, abrupt, and of a high pitch, and has a somewhat metallic, brassy sound. The respiratory effort is very labored, pro-

longed, and not frequent, but the inspiratory effort is attended by a stridulous, wheezing, metallic sound. The countenance is anxious and expressive.

TREATMENT.—At the beginning of membranous croup, Acetic Acid, in doses of 5 or 8 gtts., well diluted with water sweetened, and given in doses of a teaspoonful or so every ten minutes, will frequently cut short the disease. But if it does not give relief in a few hours, then 1 to 2 gtts. of tincture of Iodine should be given, in alternation, every two hours, in water. In all cases where the fever runs high, Aconite, in doses of $\frac{1}{8}$ to $\frac{1}{4}$ of a drop, according to the age of the patient, will control the excessive action of the heart. If there are cerebral symptoms, with barking cough, red face, dry skin, great restlessness, tonsils red and swollen, with patches of exudation on the tonsils, then 1 to 2 gtts. of Belladonna should be given. If the cough is of a whistling, metallic sound, then the Acetic tincture of Sanguinaria, in doses just short of vomiting, say 3 to 5 gtts., in sugared water, should be given every one or two hours, until the breathing is relieved, then at longer intervals, until the child is much better, or out of danger. I usually continue it six or seven days.

In cases attended with a dry crowing sound with the cough, which gets worse in the evening, then the tincture of burnt sponge, in doses of three to five gtts., every hour, until these symptoms are better. The inhalation of Bromine occasionally does good, while $\frac{1}{4}$ to $\frac{1}{2}$ gtt. is taken (well diluted) internally. If the expectoration is difficult, after the acute stage passes off, the sulphide of calcium, in doses of $\frac{1}{2}$ gr., alternated with the syrup of Senega and Sanguinaria, in doses of 60 gtts., or less, if the child is quite young. If the cough is constant and the breathing very hoarse and difficult, with redness of the tonsils, and covered with false membrane, then the Bichromate of Potash, in doses of $\frac{1}{8}$ to $\frac{1}{4}$ gr. every two hours, in alternation with the Syrup of Sanguinaria. In many cases the little patient will be somewhat relieved by the inhalation of quicklime slackening near its head, so it will easily breathe the vapor as it arises. If there is nausea and vomiting, then 1 to 2 gtts. of the tincture of Ipecac will relieve it.

EDITORIAL.

CONSISTENCY.

THIS principle is said to be a jewel; a thing of value, to be admired. We all appreciate a man who is consistent, if we do not always agree with him. He is reliable, and his word can be depended upon under all circumstances. But an inconsistent man, one who says one thing and means another, one who upholds one thing to-day, and denounces the same to-morrow, is very unreliable, if not a dangerous man.

The American Medical Association is not a very bright or valuable jewel, if estimated by its consistency. It excluded delegates from the New York Medical Society for adopting a code differing from the Code of the Association, and at the same session elected a homœopath as Vice-President. This must be a suspicious code that prohibits affiliation with homœopaths and admits them to membership; that permits homœopaths to hold office, and prohibits consultations with "legally qualified practitioners of medicine." This is allopathic consistency. This must be a code that is capable of any interpretation to suit the whims and fancies of the thimble-riggers that play the game of medical ostracism. Now you see it, now you don't. We, as a society, will admit whom we please, but you as individuals must not consult, under any circumstances, with any but the chosen children of the allopathic school.

This conduct is as consistent as is usually pursued by allopathic physicians. We never knew one of them to refuse a consultation when there was prospect of a good fee. Our observation has been that those who are always advocating the code are the first to violate it. The code is used as a terror over the heads of the rank and file, so that those who stand in the front of the profession may retain more consultations for themselves.

How long will freemen submit to be the tools of designing knaves? How long will freemen wear the collars of unscrupulous masters? We believe the end is approaching, and that the New York Code will be universally adopted.

IOWA ECLECTIC MEDICAL COLLEGE.

WE have just received the second annual announcement of this College, and congratulate our Iowa friends on the success attending their first course of lectures. We hope they shall preserve their name unspotted, and add strength and lustre to eclectic medicine.

We are sorry that they adopted the plan of two graduating terms a year, for we believe such a course would be liable to abuse. One graduating term a year is sufficient, and gives better standing to a college. We do not, however, mean to say, that an institution which holds two terms a year cannot be run as reputable as one who holds only one.

We should like to see their requirements more definite in reference to dissection. No person should be allowed to graduate who has not dissected every part of the cadaver.

Anatomy is the basis of a good medical education, and too great attention cannot be devoted to this branch of study.

We do not make these observations in any fault-finding way, for every eclectic college has our warmest sympathy. We want them not only to be equal to other schools in their requirements, but superior.

DR. ALBERT G. SPRINGSTEEN died at his residence in Cleveland City, Ohio, on the evening of the 16th of July, 1882, of congestion of the liver. Dr. Springsteen was born in the city of New York, December 10, 1827, consequently, was in his fifty-fifth year. He was a graduate of the Eclectic School of Medicine, and a very popular gentleman with the fraternity of all schools. He was an excellent scholar, a fluent speaker, and pleasing writer. His contributions to the different medical journals have been received with great favor. He was a member of the Ohio State Medical Society, and at one time President of that body. He was a permanent member of the National Eclectic Medical Association, and in 1880 chosen and elected to the Vice-Presidency of the Association. The medical profession, by the death of Albert Goodwin Springsteen, M. D., loose a valuable friend. He leaves a wife and adopted son, Frank. His mother is still living, at the advanced age of eighty-eight. His brother, Dr. Wallace S. Springsteen, resides in this city.

SELECTED.**ONE HUNDRED AND THIRTY-EIGHT CASES
AMPUTATION OF SCROTUM FOR
ELEPHANTIASIS ARABUM.**

BY GEO. A. TURNER, M. D., C. M.

FOR the twelve years previous to 1880 I was resident in the Samoan group of islands in the South Pacific, as a medical missionary, and it was there that the cases which form the subject of this paper were met with. Samoa is the name of a group of volcanic islands in central Polynesia. Elephantiasis arabum is extremely prevalent throughout the whole group, attacking natives and Europeans alike.

Shortly after arriving in Samoa I was applied to by a native to remove an enormous tumor of the scrotum, which hung down below his knees and very much impeded his walking. Being single-handed, and never having seen anything of the kind before, I naturally felt reluctant to attempt such a formidable operation. The man was so importunate, however, that I wrote to Sydney, N. S. W., to procure an aortic tourniquet, thinking that I could, by means of it, control the haemorrhage.

Such an instrument could not be obtained in Sydney; and, before I could get one from England, H. M. S. *Cossack* called at Samoa, and in conversation with the staff-surgeon of that ship, Dr. G. V. M'Donough, I mentioned the case. It happened that Dr. M'Donough was a student in Dublin in 1844 when O'Ferrall's operation took place, and witnessed it. He suggested the possibility of controlling the hemorrhage by a clamp composed of parallel bars, with screws at each end, applied to the neck of the tumour. I subsequently found that such a clamp is advised in the earlier editions of Dr. Druitt's *Vade Mecum*. An iron clamp of this description was kindly made for the purpose by the chief engineer of the *Cossack*, and on July 9, 1872, the operation was performed. The man was probably about 45 years of age, but

looked several years older. The tumor measured thirty inches in circumference at the knees, and hung down nearly to the ankles. For about an hour before operation the patient was kept lying on the operating table with the tumor raised considerably higher than his body for the purpose of emptying it as far as possible of blood. The clamp was then fixed in position, but not screwed down. Dr. Horner administered chloroform. As soon as the patient was thoroughly under its influence we screwed the clamp tightly down. Dr. M'Donough commenced the operation, dissecting up three rectangular skin flaps, one from the upper and front part of the tumor, and two lateral ones—the center one to form a new covering for the penis, and the side ones to cover the open surface after the tumor was removed. The penis was then dissected out and held up on the abdomen. The cords were next cut down upon and tied, it having been decided not to attempt to save the testicles. In each case the whole cord was included in one whipcord ligature, according to the old method. The rest of the pedicle was severed by a few strokes of the knife. The clamp was then slowly unscrewed and the arteries tied as they showed themselves. About thirty required ligature. The flaps were then brought into position and secured. The clamp answered its purpose admirably, there being no bleeding during the operation, except a little venous hemorrhage from the tumor. The operation lasted about an hour, and the greatest difficulty we met with was to support the mass. This had to be done by a plank passed under it and held at each end by an assistant. The tumor was found to weigh 77 lbs.

This second case was not nearly so large as the former, the tumor, after removal, not weighing quite 30 lbs. The operation was performed precisely in a similar manner to the first one, except that in this the right testicle was dissected out from the mass and retained. After operation the patient was removed to a house close by the one where the first patient was. Wounds in both cases were dressed twice a day with a solution of carbolic acid in oil.

These operations were performed during the time that the Samoans were at civil war. On the 23d July, exactly a fortnight after the first operation, and eleven days after the second, there was a sharp skirmish close to our premises. It was feared that one party would be driven right through the village, and the two patients, afraid to stay in their houses, *got up from their beds and walked up to my house for protection.* The panic was soon over. The men walked back again, and were none the worse. They both made a good recovery. The first, I have repeatedly seen since. After the operation he soon got quite strong and stout, and looked at least ten years younger than he did before it.

On thinking over the matter afterwards, several improvements in the details of the operation occurred to me, and these I soon had opportunities of trying. The success of the two operations which I have described led many from all parts of the Samoan group, who were similarly affected, to apply to me for relief. In the eight years, 1872 to 1879 inclusive, I performed 136 of these operations, and I am fortunately able to show photographs of several of these cases.

In one of the earliest operations which I performed, and in which I used the iron clamp above described, there was considerable difficulty afterwards from retention of urine. This, I thought might be owing to the prolonged severe crushing of the penis between the bars of the clamp. I therefore procured from Sydney a brass clamp, which differs from the original instrument only in that it has a piece cut out of the centre of the upper bar, the object of which is, as much as possible, to get rid of the undue pressure on the penis. This clamp I have used in almost all my subsequent operations, and I have never had any trouble from retention of urine after its use.

In my earlier operations I had the bars of the clamp covered with chamois leather to prevent any bruising of the skin, but I soon found that when the clamp was tightly screwed down it was almost impossible to prevent the leather round the upper bar from getting drawn into the screws, and

so locking them, and causing much trouble when the time came for loosening it.

The inside measurement of the clamp when open to its widest extent is $5 \times 3\frac{1}{2}$ inches, and I may mention that in many of the cases it was barely possible, owing to the bulk of the neck of the tumor, to get the upper bar on and the screw to hold. In two or three of the largest ones this clamp was too small, and I had to use the iron clamp already mentioned, which, when open, measured $7 \times 3\frac{1}{2}$ inches.

I have already stated that one of the greatest difficulties we met with in the larger of Dr. M'Donough's operations was to support the tumor, and yet keep it out of the way of the operator. With the view of obviating this difficulty, I had an operating table made with a leaf which was attached by hinges to the frame at its lower end. This leaf, when raised, projected about two feet beyond the end of the table at a level of about six inches lower than that of the table itself. When raised it was firmly fixed by two iron supports made in the form of arcs of a circle. One end of each of these supports was attached to the leaf near its extremity at either side, and the other ends worked through iron staples attached to the inside of the legs at the foot of the table, and were fixed by means of thumb-screws.

Let me now describe the various steps of the operation as as practiced by myself. The patient should be placed on the operating table at least half an hour before operation, and lie quietly with the tumor raised considerably above the level of the body, that it may empty itself as much as possible of its blood. The upper bar having been removed, the clamp is then applied by raising the tumor and passing the screws up from behind on either side of its neck, the lower bar being held as far back towards the perineum as possible. The tumor is then turned down and the upper bar put on and fixed in its place by the thumb-screws. These, however, at this stage, should only be applied to keep the clamp in position, and should not, in any way, interfere with the circulation in the tumor. Before applying the clamp it is always

well to make sure that no hernia exists; or if it does that it has been wholly reduced.

The clamp being in position, chloroform is administered, the tumor still being kept elevated. The clamp is rapidly and firmly screwed down on both sides simultaneously. The tumor should now be turned upwards to expose its posterior surface. If it be small it may simply be turned upwards on the abdomen, its weight being supported by the hand of an assistant. In the case of large tumors some other contrivance is necessary, and I have been in the habit of using a couple of large hooks, like shark hooks, attached to a block and tackle fixed to the ceiling. These hooks are passed through the leathery skin at the lower part of the tumor, and by means of the tackle the whole tumour is raised so as thoroughly to bring into view its posterior surface. A rounded skin flap is then raised from the posterior part of the neck of the tumor, the horns of the incision being at either end of the lower bar of the clamp. This flap should be about $1\frac{1}{2}$ inches long in its center, and should be dissected close up to the clamp. The tumor is now lowered and allowed to fall forwards so as to rest upon the leaf of the table. To enable this to be done the patient should be drawn well down to the end of the table, and his legs from the knees downwards be made to hang down, one on each side of the leaf, and be fastened to the legs of the table.

Either two or three skin flaps should now be raised from the anterior surface of the tumor. If the penis be superficial, and not covered up by hypertrophied tissue, it will be sufficient to raise a right and left rounded flap, having their outer ends at the right and left end respectively of the upper bar of the clamp, and meeting in the center under the penis. Where the penis is buried in the mass of the tumor, as it often is, in addition to the right and left flaps just mentioned, a third should be made between the two, and as this central flap is made for the purpose of affording a new covering for the penis, care should be taken that it be formed of sufficient width to permit of its encircling that organ without any

undue straining. The length of these flaps must be regulated by the probable bulk of the parts they will have to cover after the operation is completed. After dissecting up these flaps the penis is next dissected out. This is sometimes a matter of no little difficulty on account of the mass of hypertrophied tissue in which it lies buried. The best method is to start from the opening from which the urine escapes, which in some cases is found at the lowest part of the tumor, and from this boldly cutting upwards to expose the glans penis. This having been found, it is not difficult to dissect out the penis, which should then be held up on the abdomen, along with the anterior flaps, by an assistant. The next step is to find the testicles. These also, especially in the larger cases, are deeply buried in the substance of the tumor. The easiest and quickest way of finding these is to cut diagonally across the face of the tumor, first on the one side, and then on the other and partly by the use of the knife, and partly by tearing the hypertrophied connective tissue with the fingers, they are soon discovered. They should then be dissected up with their cords and held well out of the way. This having been done, a very few strokes of the knife will sever all the remaining tissues constituting the neck of the tumor, and the mass is removed. The testicles should next be examined. In some, even of the largest cases, they are found to be quite healthy; and almost, if not quite, of natural size. In the majority of cases, however, there is more or less hydrocele on one or both sides, generally associated with very considerable thickening of the tunica vaginalis. I have always treated these hydroceles by freely incising them, and, where there was much thickening of the sac, excising a very considerable portion of it. In some cases, where there was excessive hypertrophy of the sac, I have removed the testicle on that side. The next step is to tye all vessels which are seen in the stump. In all my operations I have used carbolisèd catgut ligatures, which were cut close off and left to be absorbed. The next thing is slowly to unscrew the clamp, being on the watch to tie anything that bleeds. At this stage

of the operation, when sometimes a number of vessels show themselves simultaneously, I have found great advantage from the use of Dieffenbach's small self-holding forceps, which while taking up very little room, control the hemorrhage efficiently, and give the operator time to tie the vessels one after another. In most of the larger cases there are usually some twenty to thirty, or even more, vessels which require ligature.

If it should happen in loosening the clamp, as has occurred to me on two or three occasions, that some considerable vessel, which has at first been overlooked, slips behind it and bleeds freely, the best plan is at once to unscrew the clamp and throw it off, trusting to speed in securing all bleeding points. Too great care cannot be taken to tie every point from which it seems possible that bleeding may occur, as neglect of this precaution may give rise to every troublesome hemorrhage some hours afterwards. After all the vessels have been ligatured, the flaps are brought into position, and united with wire or catgut sutures. It is well to put a drainage-tube on each side behind the testicles. A 1-20 aqueous solution of carbolic acid was freely applied before the wound was closed, and antiseptic dressing were invariably employed.

Of the 136 operations I will mention the two largest. In both of these cases the tumours weighed almost exactly 80 lbs. They were weighed about an hour after removal, and after a good deal of blood and fluid had drained away. In one case the tumour had been years in growing. When he stood up it reached almost down to the ground, and measured 40 inches in circumference. It will be observed that his limbs were all enlarged from the same disease. At the time the photograph was taken his right calf measured 36 in. in circumference, and the left only an inch or two less. In this case the testicles were both of natural size, no hydrocele; and they, with the penis, were preserved. The operation itself—formation of flaps, dissection of the organs out from the mass, and removal of the tumor—was completed in 12 minutes. The wound healed very rapidly.

In the other case the tumor, which also was of several years' growth hung down nearly to the ankles, and measured 54 inches in circumference. The elephantiasis in this case was almost entirely confined to the scrotum, the left leg and foot being the only other part affected, and that only slightly. In this case there was hydrocele on both sides; the penis and right testicle were preserved, the left testicle being removed.

Still another case is interesting as showing the occasionally rapid growth of such tumors. The patient was a man, about 20, otherwise perfectly healthy, and the tumor had grown in two years. It weighed 54 lbs. after removal. Penis and both testicles were retained, and patient made good recovery.

Of the other tumors removed one was over 50 lbs., three were over 40 lbs., and the rest were of various sizes, from about 7 or 8 lbs. up to 37 lbs. In none of the cases was the penis removed, in none were both testicles removed, and in the great majority all the organs were preserved. In one case, in which the tumor was over 20 lbs. in weight, the wound healed almost entirely by first intention, and patient walked home, a distance of several miles, within a fortnight after operation. December 22, 1874, I operated on four of these cases; on the 23d on one; and on the 25th on one; and on January 26, the last of the six went home well.

Of the 136 cases I lost only two; on the 10th and 11th day after operation respectively. In the one case obstinate diarrhoea was the cause of death, and in the other, fever. In these cases the tumors weighed about 10 and 15 lbs. respectively. In two or three other cases, however, the patients were brought very low by diarrhoea or dysentery, although they eventually recovered. In one or two cases only was there partial sloughing of the anterior flaps.

The success which attended these operations I attribute mainly to four things: 1. The completeness with which hemorrhage is controlled by the clamp; 2. The covering in of the wound with skin flaps; 3. The use of antiseptic dress-

ings; and 4. The fine physique, and coolness, and powers of endurance of the Samoans.

In the last edition of Curling on *Diseases of the Testis*, Esmarch's method of controlling bleeding is recommended in these operations. But it is added, "In thin patients arterial hemorrhage may be further controlled by compression of the aorta with the abdominal tourniquet." In two of my operations I made use of Esmarch's tubing, and it answered fairly well; but I prefer the clamp as the more effective method. In these cases, after the removal of the tumor, the elastic tube had a great tendency to slip off, and was only retained in its position with difficulty. But my greatest objection to it is that when it is employed the skin is drawn into folds, and the operation thereby rendered much more difficult. When the clamp is used, on the other hand, we have a flattened surface both anteriorly and posteriorly, which renders the operation very much more easy. Another great advantage which is gained from the use of the clamp is that, after the removal of the tumor, it is easy to slacken the screws, half a turn at a time, so as to cause any vessels which have been overlooked to show themselves, the bleeding being easily controlled by tightening them up again.

The practice of forming flaps of skin for covering the wound has been objected to by some as tending to cause a recurrence of the disease. Sir Joseph Fayrer, for example, says, "No attempt should be made to preserve flaps of integument, which are unnecessary, and almost certain to be the seat of recurrence of the disease. In from two to four months all is closed in by cicatrix tissue, which gradually perfects itself, and is not liable to become the seat of recurrence of the disease." But, in the great majority of cases, it will be found that the skin covering the neck of the tumor is healthy. It is skin which has been stretched and drawn down by the weight of the tumor from the perineum and pubes. Surely it is not contended that the state of the skin is the exciting cause of the disease; and why the preserving of a few inches of it more or less should increase the danger of its recurrence,

I do not understand. Besides, if it be possible, to cover up the necessarily large wound by skin flaps, its more rapid healing is ensured, and the danger of evil results thereby lessened. The formation of a posterior flap as the first step of the operation is, I think, of great advantage. It is done at this stage much more easily than if left to the last, when the bulk of the tumor, severed from its attachments anteriorly, would seriously inconvenience the operator. As already stated, it should be made short, so as to have the line of union well behind, in order to favor the escape of discharges from the wound. In some cases where I feared retention of fluids and bagging of the posterior flap, I have, when closing the wound, divided it in the center, so as to ensure a thoroughly dependent opening.

The Samoans, who are of the Malayo-Polynesian type, are one of the finest native races to be met with in any part of the world, and their powers of endurance and coolness no doubt contributed largely to the success of these operations. One instance illustrative of this may be mentioned as quite unique in its way. One day, when I had made arrangements for the performing of three of these operations, one of the three patients asked permission to witness the operation before undergoing it himself. He stood quietly by, and carefully watched every step as performed on another, and after all was over he took his turn on the operating table without the slightest evidence of any hesitation.

In describing the operation I have spoken of chloroform, but in almost all my cases I used the bichloride of methylene. I first used this anæsthetic on account of statements of Dr. Richardson, Mr. Morgan, and others, who claim that it is "less dangerous than chloroform," that "its action is more rapid," that recovery is more prompt," and that "if dangerous symptoms show themselves during its administration, they subside sooner on discontinuing the inhalation." It will be easily understood that these advantages, if really possessed by it, were of the greatest moment to me, considering that, with very few exceptions, my operations were all per-

formed with only the help of untrained assistants. I have been thoroughly satisfied with it, and never had any difficulty in connection with its administration, though this was in almost every case done only by a native.

In former times native surgeons occasionally operated on these cases, but all they attempted was to reduce the bulk of the tumor by taking a slice off it with a sharp piece of bamboo. Alarming hemorrhage, and sometimes even death, from this cause, followed these operations. They were not often performed, however, as the Samoans had a very wholesome law that, in surgical operations, if death took place within five days, the surgeon was looked upon as having caused the untoward result, and it was allowable to take his life in retaliation. I have sometimes been not a little amused at the friends of some one on whom I had operated coming to report to me, on the lapse of "the five days," that my patient was all right, thinking, evidently, that my mind would thereby be relieved!—*Glasgow Med. Jour.*, June.

CYSTO-SARCOCELE OF THE TESTIS—Castration.

BY A. J. HOWE, M. D.

ON the 29th of May I was called to see Mr. R., a vigorous man seventy-five years old. His right testicle was very large, and generally painful. I plunged an exploring needle into the tumor to assist in the diagnosis. The hollow implement drew off a half pint of a deep-red fluid, yet left a mass of material that might be denominated hypertrophy of the tunica vaginalis and dartos. I pronounced the disease to be cysto-sarcocele of the testis, and advised excision of the mass—castration. The patient acquiesced in the method proposed, and set the following day as the one for the operation. At the appointed hour the execution took place. The spermatic cord was greatly enlarged to a point as high as the external abdominal ring, hence I was in some doubt as to the best manner of treatment, yet left this part of the procedure to contingencies.

After full anæsthesia was attained, I made an incision into the scrotum, laying the integument open from a point above Poupart's ligament, to the base or bottom of the tumor. I then cleaved the scrotum from the hypertrophied mass, lacerating a not dense cellular or connective tissue. In a few minutes the tumor was free, or having no attachment except through the medium of the thickened spermatic cord. This I carefully examined, but could not determine one thing from another. The mass looked like hypertrophied cremaster muscle—sarcomatous. Not daring to trust so much material to the constricting force of one ligature, I transfixed the mass, and then tied each half or part separately, using a hempen cord that the strength of the hands could not break. Shears severed the pedicle below the ligatures, and the stump revealed no bleeding vessels. However, as soon as reaction took place, arterial hemorrhage became apparent. With toothed forceps I seized the divided arteries and some enveloping tissue, and an assistant tied a fine silk ligature around the bleeding points. The edges of the incised scrotum were placed in contact, and a wet compress laid upon the wound. To obviate intense pain, morphia was hypodermically thrown into the anterior aspect of the thigh. The next day the patient expressed himself as comfortable, having less pain than for weeks. I prescribed a solution of thymol as a dressing, and used no pain alleviator, for none was needed. Every symptom was favorable, and no untoward symptom appeared during the healing process, which took about fifteen days. On the ninth day I pulled gently on the silken ligatures, and they came away without resistance. One hempen cord came off under moderate traction, but the other had to be divided with the point of a knife to set it free. At the end of three weeks the old gentleman was walking about and declaring that he was as well as ever. Whether the disease has a malignant taint remains to be seen, but I trust not. Upon opening the excised tumor the testicle was seen at the bottom of the cyst, and obviously normal, but the epididymis apparently gave origin to the hypertrophied sac or cysto-sarcocele.

At the commencement I was anxious about annoying hemorrhage, tetanus, erysipelas, and septicæmia, but neither unwelcome complication showed itself. No Listerian adjunct could have bettered the healing process; it was admirable, and all that could be reasonably desired. The pulse of the patient and his temperature were close to normal all the way through. He ate and slept like a well man, and his evacuations were natural. The suppuration of the extensive wound was profuse for several days, and the discharge was perceptibly offensive, yet the thymol did better than carbolic acid, or other antiseptics. There was no foul odor at any time. As the wound healed I snipped a few straggling hairs that persisted in becoming entangled.

Although the above includes a full report of the case, I embrace the opportunity to express some views upon castration executed to remove disease. It is not my purpose to review the action of Semiramis, who castrated feeble males in order that her subjects might improve in vigor; or of those magnates who keep harems, and mutilate male servants to keep them chaste; or of those surgeons who once executed castration to cure hernias. My object is to write what may assist a fellow practitioner who has had little experience in the management of diseased testes. In a case of simple hypertrophy of a testicle, it is best to try strapping or compression of some kind, and such internal means as tend to reduce deposits in adenoid structures. The iodides have the well-earned reputation of doing this.

A syphilitic or tuberculous testis is to be managed like a simple hypertrophy, except that arsenic should constitute a factor in the treatment. Plethoric patients having a venereal complication may take minute doses of the biniiodide of mercury.

Cancer of the testicle should be treated by castration of the diseased organ; and such internal medicines as are known to check the destructive tendencies. A fatal result is to be expected, though the issue may be postponed for a year or two, or longer.

Curling, excellent authority, says that cystic testicle begins in the *rete testis*, and extends to the tunica reflexa or vaginalis, the disordered membrane becoming thickened. It is perilous to attempt a cure by the use of irritating injections, as hydroceles are successfully treated.

Cysto-sarcoceles are to be excised, as in the clinical case reported. And from my own experience, backed by the words of Erichsen and those of other reputable surgical writers, I say that the spermatic cord can be safely tied with whip-cord or strong ligature, and then the morbid testicle be removed with scissors or scalpel. I formerly detached the vas deferens, and, after dividing it, I did not include it in the ligature. I now do not think such a precaution necessary.

It is said that there is danger of a bleeding stump being drawn by the cremaster muscle into the inguinal canal, and even into the cavity of the abdomen, but I have not met with such complications.

All my cases of castration have survived the traumatism, yet in two cases of carcinoma of the testis, the patients died within a year or two, the disease seemingly being transferred to the kidney, or other internal organ.

In cases of epithelioma of the scrotum, the proximate testicle may become involved in the transforming processes. In such a complication it is best to excise the invaded testis, and to cut away a liberal share of the scrotum.

In the event a testicle is not wholly descended, and a hernia exist, a truss cannot be worn on account of its pressure upon the undescended organ, hence the undeveloped, yet sensitive, stone must be excised. The operation consists in reducing the hernial protrusion, making an incision in the integument over the inguinal canal, pulling the testicle through the aperture, ligating the diminutive cord, and clipping away the troublesome gland. In ten days the ligature will slip off, and the remaining wound soon heal. And it will generally be found that the inguinal canal is so completely occluded by the inflammatory exudations that the hernia never reappears. I have executed this operation in a half-dozen instances, and always with success, and a radical cure of the hernia.

EXCISION OF THE INTESTINAL CANAL WHERE COVERED WITH PERITONEUM.

TO THE EDITOR OF THE MEDICAL RECORD:—

SIR—In the number of THE RECORD for June 17th, in the report of the transactions of the Surgical Section of the American Medical Association, I am credited with conclusions upon excision of portions of the alimentary canal that were quoted from Koeberlé. I fully endorse his conclusions, and had put them in practice years before he published them, and published an illustrative case in the *Philadelphia Medical and Surgical Reporter*, of October 25, 1879. The conclusions I drew from my own and other cases are as follows:—

First.—Any portion of the alimentary canal may be safely excised, and stricture, cancer, perforating ulcer, and gangrene demand that it shall be done.

Second.—The method heretofore adopted of suturing the divided ends of the bowel is dangerous, because tympanites, by pressing upon the heart and lungs, interferes with the vital processes in a patient already worn down by disease and shock, and by distension causes traction upon the sutures in such degree as, in many instances, to cause their giving way, which is followed by fecal extravasation, peritonitis, and death.

Third.—These dangers are to a great extent obviated by making an artificial anus, and permitting the escape of the gases as they form.

Fourth.—Artificial anus is easily cured by a plastic operation devised by myself, and described in the paper.

Fifth.—If that portion of the bowel which constitutes the eperon be cut away at the time of the first operation, no suture operation will be found necessary, as the artificial anus will close spontaneously by cicatricial contraction.

Sixth.—The successful cases reported in the paper prove the propositions to be true.

To the conditions requiring excision I should have added “some gunshot wounds.”

In the discussion that followed, Dr. Ransohoff suggested that the cutting away of the eperon at the first operation might be unadvisable on account of it consisting of the mesenteric portion through which the bowel receives its nutrition. His objection is good and valid to some extent. The vascular supply is so great, and the anastomoses of the blood-vessels in the intestines so extensive, that it is very probable that sufficient nutrition would be carried to exposed parts, and it is further well known that vessels are rapidly thrown out from adjacent parts that supply nutrition, as happens to the distal portion of the pedicle where it is tied and dropped in ovariotomy operations. Still, such an objection may be shunned by a quarter-turn of the intestine, and excision of a portion that would be eperon to one side of the mesenteric attachment.

In the paper I collected all the cases of excision of the intestine, for whatever cause, that I could find a report of, and in several I found that the patients that had been operated upon died from the giving way of the stitches within the abdomen. This could have been obviated by making an artificial anus. There is still another danger that will not be encountered by following the same practice, and that is the cracking open of the peritoneal coat of the bowel from overdistention. From these crevices exude inflammatory products that, decomposing within the abdomen, produce the septicæmia and death as described and insisted upon by Drs. Dugas, Sims, Hunter, McGuire, Peaslee, W. T. Briggs, and others. The overdistention causing, in many cases that are already worn down, paralysis and consequent intestinal obstruction, a condition that undoubtedly kills many patients who have typhoid fever. I have seen in one case of typhoid fever that I was called to several years since, with Dr. Francis Drude, of this city, where there was enormous tympanites the most markedly favorable result from aspiration removing the excessive gases. These gases are prone to accumulate after all serious abdominal operations and the accumulation is one of the almost constant complications of ovariotomy.

The closing of the intestine and dropping it back into the abdomen, and stitching up of the abdominal wound, prevents ready drainage and removal of the septic products of inflammation. When an inflammatory process elsewhere than in the abdomen produces pus or other septic material, the first thing the surgeon does is to make large openings and give it free exit, and, if he considers it necessary, he goes farther and washes it out with some antiseptic solution. This treatment of late has been adopted even in the treatment of joint diseases, a class of cases that were approached a few years ago with as much fear as the abdomen was; no one will deny that the present practice is not superior to that of the past, then, things equal to the same thing being equal to each other, why not apply it to all conditions where there is retained septic material, not waiting until there has been poison enough absorbed to overpower the patient, for such waiting would be disastrous alike to the good fame of the surgeon and the profession. Neither would I have it supposed that I favor indiscriminate abdominal and intestinal section, but I would have it made in those cases that have heretofore proved so fatal.

This doctrine is not new with me as will be seen by referring to a paper read by myself at a meeting of the American Medical Association in Richmond last year. Some of the gentlemen in discussing the paper seemed to forget that it referred to any class of incisions except in cases of gangrene from strangulated hernia, or, what is more probable, did not hear the paper read, and discussed it from the hearsay standpoint. These gentlemen, who are able and conscientious surgeons, that are teaching, and teaching well the science and art to those that are to come after us, opposed any interference in cases of gangrene in strangulated hernia further than simple incision, holding well to the doctrine taught in the text books, "not to meddle with the adhesions." Now, this doctrine, I think, will admit of considerable modification.

There are cases where, as in femoral hernia, the opening under Poupart's ligament leaves a very narrow contracted open-

ing, that is likely to become much narrower, and if spontaneous cure of the artificial anus ensues, there is a liability to partial or complete intestinal stricture that may at any time become blocked by solid or semi-solid egesta. The same objection will apply to gangrenous hernia occurring anywhere else, where half, or more, not including the whole, diameter of the intestine becomes gangrenous. The very fact of spontaneous cures of artificial anus occurring renders the risk greater than if the opening had been cured by the surgeon cutting down the eperon with an eterotome or other means, ensuring a sufficient passage way for the contents of the bowel.

The fear of being unable to close the artificial anus I believe has deterred surgeons from making it as often as they would otherwise have done. The operation I have introduced and described, both in the paper read at St. Paul and in the *Philadelphia Medical and Surgical Reporter*, of October 25, 1879, I hope will be as efficacious in other hands as it has been in mine, though I hope the cutting down of the eperon at the first operation may take the place of any plastic secondary operation.

My own experience has been limited, having performed enterotomy and making artificial anus but six times, of that number none died under two months, none died from the operations or its consequences; three are yet living, and of the three one had eight inches of intestine and a large piece of omentum excised October 9, 1878, and one had three inches of intestine excised January 21, 1882, both are in excellent health and bid fair to be for many a day. I hope that other and abler men, men who have better opportunities to investigate, and whose reputations bring them more patients, will investigate this subject thoroughly and impartially, that the truth may be arrived at. That one man, very able to render great service has commenced the work, I am informed through the columns of the London *Lancet*, and *British Medical Journal*. That man is Mr. Thomas Bryant of Guy's Hospital. He reports a successful case of excision of a stricture in the descending colon, leaving an artificial anus. In conversation

with him, last August, I entered minutely into the subject and sent him the papers I had written. Hoping that my own countrymen may assist in the rapid and correct solution of these problems,

I remain, very truly yours,

WILLIAM A. BYRD.

407 Jersey Street, Quincy, Illinois, July 17, 1882.

WHAT IS A CONSULTATION ?

TO THE EDITOR OF THE MEDICAL RECORD:—

SIR—The question has arisen in the mind of the writer, who is as yet but little experienced as to the practical working of codes of medical ethics, as to what constitutes a "consultation." Is it a consultation for a specialist to treat a patient sent to him by a physician of another school? An oculist, for instance, prescribing treatment, can hardly be said to consult with the general practitioner who has given the case over to his direction. His authority becomes supreme, and whatever he may recommend is followed implicitly and naturally because of the existence of confidence in his great skill on the part of those who have employed him. He does not compromise himself in any way as regards professional integrity, he yields no point as to the treatment to be pursued. On the other hand the general practitioner, who has given the case up to his direction, no longer has any responsibility as regards the treatment, that having been decided upon by the specialist. The only question that remains is as to whether it is justifiable to treat a patient knowing that he will employ a physician of another school to act in a subordinate capacity—really as a nurse—whose business is simply to see that the treatment prescribed is properly carried out? With this view of the case, is it a matter worth contending about?

Again, suppose a family employing a homœopathic physician wishes to obtain the opinion of a physician of the regular school, is it a "consultation" for such a physician to respond and to express himself as freely as he pleases in regard to the case in question and the treatment to be fol-

lowed? Is it not rather a grand opportunity for him to vindicate the honor of the profession by demonstrating practically that he is possessed of superior judgment and skill. If the parties who have called him are convinced that he has a better understanding of the case and yield to his judgment, it is an evident victory; and in any case there is no longer room for the lurking suspicion or the open taunt, that the doctor is afraid to meet the homœopath. He has not yielded one iota of his principles or convictions. If he finds the homœopath giving such medicines as are prescribed by the regular school, he has fine opportunity to call attention to the fact, and thus destroy at a blow the false pretensions that have existed; or, if he finds quackery rampant, he can refuse to have anything further to do with the case unless the treatment he may recommend is adopted. In any case, it does not appear that he has had a consultation or sought to have had an agreement with a heterodox practitioner. On the contrary, he has done his duty to suffering humanity, and taken the surest means to uproot quackery. It seems to the writer that if physicians have the privilege of doing the things indicated, it is all that can be asked or expected, and that any talk about freedom of consultation beyond what has been indicated is rather nonsensical from any point of view. In fact, the discussion that has arisen about the modification of the code appears to be having the undesirable effect of giving quackery the benefit of a vast amount of free advertising, whilst it appears that the point at issue is exceedingly small, provided that practitioners are allowed to do what has been indicated in this article.

M. A. VEEDER, M. D.

LYONS, N. Y., July, 1882.

BARONETCIES AND THE MEDICAL PROFESSION.—English doctors are vexed just now that nine baronetcies have recently been conferred and none given to doctors. The *Medical Press and Circular* gives the comforting intelligence that one was conferred upon a Mr. Lawes—an estimable gentleman who deals in manure.

THE MATHEMATICS OF HOMOEOPATHY.

BY STILES KENNEDY, M. D.

I AM requested to elucidate the mathematical principle on which homœopathic medicines are compounded.

"If two drops of a mixture of equal parts of alcohol and the recent juice of any medicinal plant be diluted with ninety-eight drops of alcohol in a vial capable of containing 130 drops (for the convenience of shaking), and the whole be twice shaken together, the medicine becomes exalted in energy to the first development of power, or, as it may be denominated, the first potency. The process is to be continued through twenty-nine additional vials, each of equal capacity with the first, and each containing ninety-nine drops of alcohol, so that every successive vial, after the first, being furnished with one drop from the vial or dilution immediately preceding (which has just been twice shaken), is, in its turn, to be shaken twice, remembering to number the dilution of each vial upon the cork as the operation proceeds. These manipulations are to be conducted through all the vials, from the first to the thirtieth or decillionth development of power, which is the one in general use."

The first dilution mentioned above contains $\frac{1}{100}$ of a drop of the juice of some medicinal plant. To get the second dilution, one drop of the first dilution is added to ninety-nine drops of alcohol, making 100 drops in the second vial. Its medicinal quantity is represented mathematically as $\frac{1}{100} \times \frac{1}{100} = \frac{1}{10000}$ of a drop of the juice.

The third dilution and all subsequent ones are made in the same way, and the proportion of medicine decreases 100 times at each dilution, as the fraction is multiplied by 100. So we have as representing the proportion of medicine in third dilution $\frac{1}{10000} \times \frac{1}{100} = \frac{1}{1000000}$ part of a drop of the juice.

Fourth dilution contains $\frac{1}{100000000}$ part of a drop of the juice; fifth dilution contains $\frac{1}{1000000000}$ part of a drop; sixth dilution contains $\frac{1}{10000000000}$ part of a drop.

To get a mathematical representation of the quantity of medicine in the thirtieth dilution, it is necessary to take a unit and sixty ciphers for a denominator, and a unit for a numerator; or, expressed decimally:

To get the strength of the two hundredth dilution, which is the lowest of the "highest" dilutions of Hempel, more than five strings of ciphers like the above must be added to it.

How shall I attempt to represent the mathematical quantity of medicine in a dilution mentioned by some, where a unit and eighty thousand ciphers stand for the denominator, and a unit for the numerator?

Of course it is an easy task to make a unit, run a series of ciphers after it, point them off and enumerate them, but to seriously contemplate them, to analyze, separate and attempt to comprehend their full import is intensely difficult. The mind soon becomes bewildered and finally lost in its perplexity.

Perhaps the infinitely small may be better comprehended by a comparison with immensity.

In all the dilutions made so far only one drop from the first vial has been used. That one drop contained a 1-100th part of a drop of the juice of a medicinal plant. Let us now try and make the whole of the first vial—100 drops—into dilutions, using the whole of each dilution for the next succeeding one:

1st dilution,	-	-	-	-	100 drops.
2d	"	-	-	-	10,000 drops, or 1 pt.
3d	"	-	-	-	100 pints.
4th	"	-	-	-	10,000 pints.
5th	"	-	-	-	1,000,000 pints.
6th	"	-	-	-	12,500,000 gallons.

This sixth dilution is, to use an Irish bull, the conservative ground of the "low dilutionists." But the high dilutionist looks down with unutterable contempt upon the barbarian homœopath who habitually administers such powerful (weak?) solutions to the human system. Perhaps a better idea of the

status of this dilution may be gained from the statement of the fact that, if the original drop of the juice of the medicinal plant was put into a body of water 20 feet deep and 500 feet in circumference, the same mathematical proportions would hold as in the sixth vial, or dilution. For the ninth dilution it would require a body of water 40 feet deep and 70 miles in circumference.

A further idea of the wonderful increasing proportions and vastness of the quantity of water necessary to make the twelfth dilution is gained by the readily computed fact that it takes a million of bodies of water like the ninth dilution. We are familiar, in one sense, with the earth as an oblate spheroid 8,000 miles in diameter; now imagine sixty-one such bodies placed in a row, stretching through four hundred and eighty-eight thousand miles; if these immense bodies were all water, they would all be required for the fifteenth dilution of the single drop of juice.

I have used water as a menstruum instead of alcohol, simply because the human mind can conceive of vaster quantities of water. For our purposes this demonstration of the strength of homœopathic dilutions is carried far enough. If the mathematically curious chooses to go farther with it, he will only have to multiply the fifteenth dilution, 61 earths, by 100, and each subsequent dilution the same way. He will soon find that he has exhausted sun, moon and stars so far as we know, and all the intervening space! This is the decillionth power, which is the one, according to Hannemann, generally used.—*The Detroit Lancet.*

AID IN LABOR.—Dr. W. H. De Witt, *Cincinnati Lancet and Clinic*, speaks in high terms of a band extending under the feet, on which the parturient woman can both push and pull. It is called a new method, but was reported long ago.

IRON AND CHLORIDE OF AMMONIUM.—Stewart states in the London *Practitioner*, that chloride of ammonium greatly facilitates the effect of iron given in the proportion of one-half a grain to every minim of the tincture of iron.

A NEW MEDICAL SCHOOL IN AUSTRALIA has just been established. The school is a part of the Sydney University, and is well endowed by Government.

OXYDIZED WATER will, according to Mr. Paul Bert, arrest fermentation from organized ferments, but has no effect upon unorganized ferments.

COMPARATIVE SIZE OF DROPS.—The following table approximately gives the average number of drops in a *fluid drachm* of the various classes of U. S. P. preparations:—

Sulphuric ether.....	174	Mixtures.....	89
Fluid extracts.....	141	Vinegars	77
Spirits.....	141	Syrup not containing fl'd. ext's.....	69
Tinctures.....	136	Solutions (1 exception).....	66
Volatile oils.....	131	Diluted acids.. ..	61
Oleo-resins.....	124	EXCEPTIONS.	
Acids (3 exceptions).....	123	Sol. nitrate of mercury.....	131
Wines	106	Nitromuriatic acid.....	76
Fixed oils.....	103	Muriatic acid.....	70
Syrups containing fl'd. ext.....	07	Sulphurous acid	59

M. PASTEUR is a native of the Jura, President Grevy's department, and is short, angular, powerfully built, and shows in his countenance his humble origin. One sees that he has issued from a hard-working race, and has himself led a laborious life. People who have leisure are wordy and take time to give neat and graceful turns to their phraseology. This is seen in M. Renan. M. Pasteur goes straight to the point. He speaks in a clear voice, is a close reasoner, emphasizes to make his hearers well retain what he says, and not to charm their ears, and uses abrupt, quick gestures, which, if not elegant, are telling. Pasteur is a steadfast believer in Spiritualism. He was not ashamed to say that in his estimation there was nothing positive in the Positivist doctrines of Comte. The central fact of the universe, namely, Infinity, was, he continued, overlooked by the Positivists, whose forecasts, political and social, time had shown to be wrong. They were only in the truth when they accepted the conclusion of Littré, to the effect that, without a spiritual link, the human family would fall to pieces and nations become as mere hordes. But they fell into the error of placing this bond in a sort of religion, proceeding from humanity, and inferior to it.

DISSECTION MATERIAL.—About six hundred bodies are dissected annually in Berlin.

THE DEATHS FROM INTEMPERANCE in Great Britain and Ireland number annually about forty thousand, according to Dr. Norman Kerr.

AN INSTITUTION FOR THE APPLICATION OF EUTHANASIA.—A singular legacy was recently left to the French Government by M. Giffard, the well-known Parisian inventor of balloons. He desires that his money shall be devoted to the establishment of national institutions, in which persons suffering from painful and incurable diseases may be allowed, by the use of chloroform and other anæsthetics, to put an end to themselves, under the direction of medical experts, and with the consent of their friends. M. Giffard, it is said, secured an euthanasia for himself by means of a special apparatus he invented for the inhalation of chloroform. M. Renaud is reported to be in favor of painless suicides in such cases, his only stipulation being that no man shall by law be entitled to take his own life until he has obtained the consent of his friends in a *conseil de famille*.

WAR ON PASTEUR.—A correspondent of the *Cincinnati Lancet and Clinic* has visited the laboratory of the Brown Institute near London, and describes the experiments which Klein is making with anthrax vacilli. He finds that these vacilli multiply by spores at 40° C., but do not do so at 43° C. This agrees with Pasteur's experiments. Klein finds, however, that the cultivation of the vacilli can be done without spores (by fission) at 25° C. The cultivated vacilli, however, had no protective influence upon rats, guinea-pigs, mice, etc., as averred by Pasteur. It seems probable that further experiments will fail to confirm some of Pasteur's conclusions, and we are informed that there is likely to be war to the knife.

THE SECOND YEAR COURSE OF ANATOMY has been abolished by the College of Surgeons of England. Students are now obliged to attend anatomical lectures for one year only.

YALE THERMOMETRIC BUREAU.—The report of Mr. Waldo for 1881–82 states that 3,811 physicians' thermometers have been examined in the year 1881–82, which is more than double the number of the previous year. Four were broken at the observatory in handling and twenty in transit, the latter being in all cases carelessly packed. The amount of error found in the readings averaged about 1° F.

MEDICAL AESTHETICS.—At the banquet given at the annual meeting of the State Medical Society of Arkansas, there were ingenious accompaniments to the feast. At each plate was a little white roll, in appearance suggesting a surgeon's bandage and labeled "Epicurean bandage." Upon unrolling this it was found to consist of a yard of fine gros-grain silk ribbon, upon the middle third of which was printed, in red letters, the bill of fare, in the form of a prescription, in Latin phraseology, the perusal of which afforded much amusement. At each plate also lay a model of a surgeon's saw in stiff card, upon which were printed the toasts, with the names of those who were to respond to them.

ACNE FILARIS AND ACNE OF THE FACE.—M. Lallier, of the Skin Hospital (St. Louis), thus treats acne filaris, which develops itself on the forehead, near the hair, slightly resembling eczema:—1st. The following lotion to be applied every night: Sulphur (flowers), $\frac{3}{4}$ vj.; alcohol, $\frac{3}{4}$ iss.; water, $\frac{3}{4}$ j. 2d. Alkaline baths. 3d. Take at each meal half a teaspoonful of bicarbonate of soda in a little sugared water. As to acne of the face, he applies every night, with a hair pencil, the following preparation: Water, $\frac{3}{4}$ iv.; camphorated spirits, $\frac{3}{4}$ j.; washed sulphur, $\frac{3}{4}$ ss.; glycerine, $\frac{3}{4}$ iiiss.; which is carefully washed off in the morning. When sulphur does not succeed in the treatment of acne, recourse may be had to black soap, which can be employed for four consecutive days, after which abstention is enjoined, when the treatment can be recommenced; and so on until the patient is cured. But as the general health generally requires looking after, M. Lallier orders tartrate of iron, $\frac{3}{4}$ ss.; aloes, eight grains, for 100 pills; two to be taken at each repast.

PHENIC ACID IN WHOOPING-COUGH.—Dr. Aymerich recommends, in the treatment of whooping-cough, the employment of phenic acid with bromide of potassium: bromide of potassium, 3 j.; phenic acid, three to four grains; syrup of lemons, q. s.; vehicle, 3 vj. A large or a small spoonful, according to the age of the patient, every two hours. He has never seen any accident to follow from the antiseptic agent.—*Medical Press and Circular.*

GERMAN OVARIOTOMY.—Professor Schroeder (Berlin) has performed two hundred and fifty ovariotomies. The first hundred gave a mortality of seventeen, second of eight, and only three died of the last fifty operations, of these only one of septic infection. Schroeder sees no reason why he should abandon his style of operation. He retains the spray, as he asserts that the peritoneum absorbs the germs of infection, and it was impossible to clean all its parts in such an extent by any other method. Besides this, he is no great friend of a large assortment of instruments and of too many assistants. He does not believe that he could decrease the mortality to a much lower degree than he had obtained, averaging five to fifteen percentage. Martin's percentage of death is eighteen, and he only differentiates from the former operator by operating between the legs of the patient whilst sitting.—*Berlin Klin. Wochensch.*

STRANGULATED HERNIA TREATED BY BELLADONNA.—Mr. Smith Batten (*British Medical Journal*, July 15, 1882) reports two cases of strangulated hernia treated successfully with tincture of belladonna (B. P.) In one the drug was administered in half-drachm doses every half hour, until the specific effects were manifest, and in the other, "scruple" doses every hour. We have seen full doses of opium produce the same effect.

EXCISION OF THE KIDNEY. Mr. C. Heath, of London, excised the kidney, July 12th. The patient was a young child, and the disease sarcoma. Death occurred eighteen hours after the operation.

ŒSOPHAGOSTAMY is a new term to designate the formation of a œsophageal fistula in cases of stricture of the œsophagus. The operation proposed by Mr. Reeves has recently been performed by him upon a male patient, aged sixty, with malignant disease of the œsophagus. At last accounts the patient was doing well.

DR. ANDREW BUCHANAN, Professor of Physiology, University of Glasgow, died July 9th, at the ripe age of eighty-four years.

A RUSSIAN MEDICAL CONGRESS will be held at Moscow after the opening of the exhibition at that city.

DEATH UNDER ETHER.—Mr. Lawson Tait, of Birmingham (*British Medical Journal*, July 15th), reports a death from ether. The patient was an anæmic woman, aged forty-five, who had an abdominal tumor. Death occurred during the administration of the anæsthetic, and is believed to have been occasioned by the use of an inhaler by which the patient breathed over and over again the same volume of ether and air.

CHRONIC CASES IN BELLEVUE HOSPITAL.—The surgeons of Bellevue Hospital are complaining through the columns of the secular press that the other hospital surgeons of the city send all their chronic and incurable cases to them, thus increasing the mortality of said institution, and crowding the wards with uninteresting cases. The other hospitals repudiate the charge and say that Bellevue is an alms-house hospital, and must necessarily take everything sent to it.

SOLVENT FOR DIPHTHERITIC MEMBRANE.—Dr. W. Hale White, *Lancet*, states that acid glycerine of pepsin is an excellent solvent for diphtheritic membrane. It may be used as a spray. [We would suggest Jensen's crystal pepsin.]

BISMUTH CONCRETIONS.—A woman in Germany, who for a long time used bismuth freely, died, aged 60, from inanition. The stomach was found filled with a mass of bismuth mixed with mucus, weighing over a pound.—*Pacific Medical and Surgical Journal*.

JAUNDICE FROM CHLOROFORM.—S. J. Power, *Western Medical Reporter*, reports that a lady aged 23 years, of good health submitted to three operations, under chloroform, for hair-lip. After each operation she had severe jaundice, which is supposed to have prevented union after the two first operations.

JABORANDI A GALACTAGOGUE.—Dr. H. B. Perce, *Therapeutic Gazette*, reports several cases in which Jaborandi was given with much benefit to increase the flow of milk. In a few cases salivation was inconvenient. In one case the babe, three weeks old, is said to have been salivated.

SACRED WELL OF MECCA.—Prof. Franklin gives an analysis of the water contained in the sacred well of Mecca. It contains 579 grains of solid matter to a gallon, or impurities about seven times greater than London sewage. The water is distributed among Mohammedans who drink it. Cholera and other diseases might be attributed to this cause did not their faith save them.

RESTORING THE HEART'S ACTION.—Dr. J. C. Reid, *British Medical Journal*, gives two instances in which a continuous stream of hot water—not scalding—poured over the chest of persons supposed to be dead restored the action of the heart, and one lived for several, the other many years afterwards. One of these was laid out, the other had just died; both were warm over the heart.

ANÆSTHETIC MIXTURES.—The Vienna mixture, used in 8,000 operations without accident, consists of three parts of ether and one of chloroform; Billroth's, three of ether, one each of chloroform and alcohol. The committee of the Medico-Chirurgical Society, of Great Britain, recommend one part, by measure, of alcohol, two of chloroform, and three of ether.

GASTROSTOMY was recently performed by Mr. Langton, St. Bartholomew's Hospital. Patient, a young child; disease, stricture of œsophagus from swallowing lye-water. Result, death one week after operation.